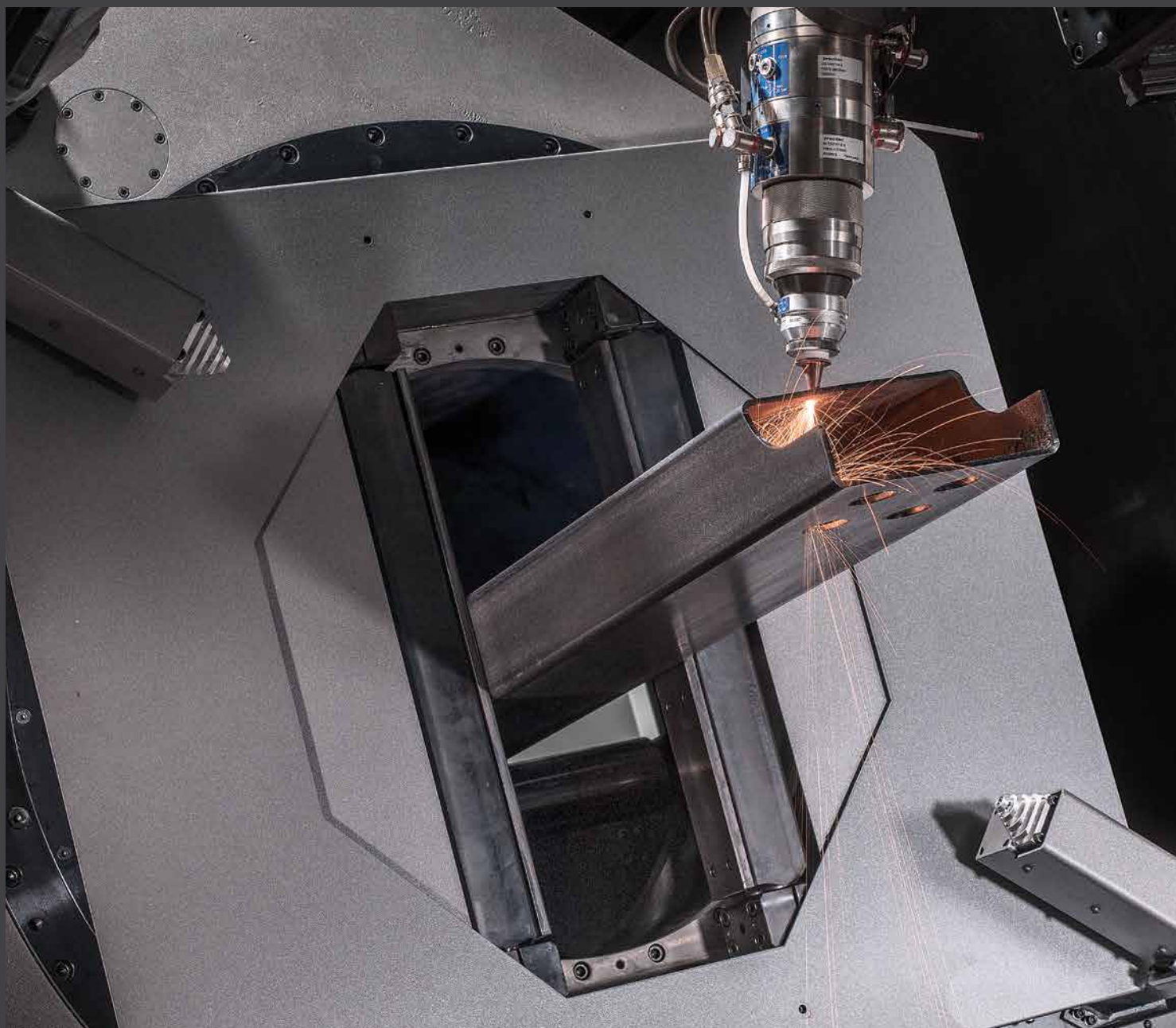


| EN |

LASERTUBE LT14 - LT24

www.blmgroup.com



BLM GROUP

The Group's experience and strength

BLM GROUP has been dominant in the tube processing sector for over 60 years supplying bending, endforming, cutting to length and, more recently, laser cutting solutions for tubes. BLM GROUP laser cutting solutions are successfully

used in the furniture, automotive and transport (industrial vehicles, agricultural machinery) industrial sectors and for various structural applications (construction, structural steel systems and major fabrications).

CREATING VALUE WITH ENTHUSIASM

- over 1300 installed Lasertube systems
- over 25 years of tube laser cutting developments
- integrated design and production environment
- a complete range of laser machines and systems for processing the widest variety of sections, materials and thicknesses.

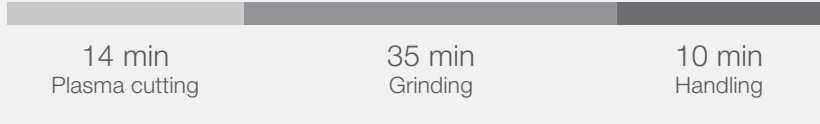


Quick turnaround time

Laser tube cutting dramatically reduces processing time, particularly for large parts, while guaranteeing excellent final accuracy.

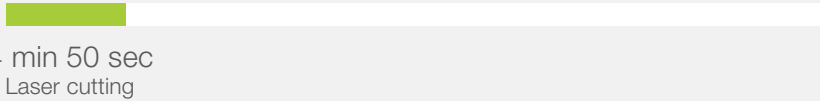
Conventional technology

Final accuracy ± 5 mm



Lasertube technology

Final accuracy ± 0,1 mm



Part cost -40%



Frames and structures

Multiple tube rests allow intricate designs for frames and tubular structures - ideal laser cutting applications.

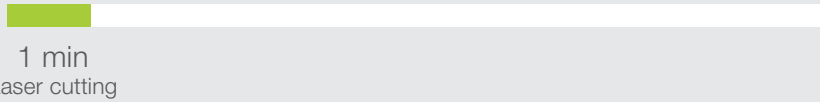
Conventional technology

Final accuracy ± 2 mm



Lasertube technology

Final accuracy ± 0,1 mm



Part cost -30%

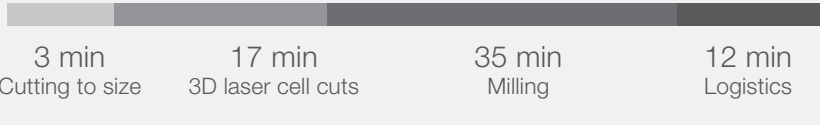


Simplified assembly

The use of open profiles and special sections simplifies assembly and reduces final construction costs.

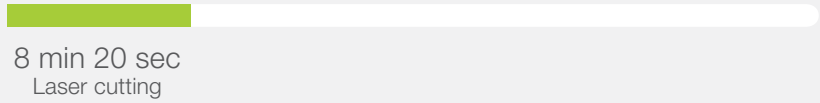
Conventional technology

Final accuracy ± 3 mm



Lasertube technology

Final accuracy ± 0,1 mm



Part cost -25%

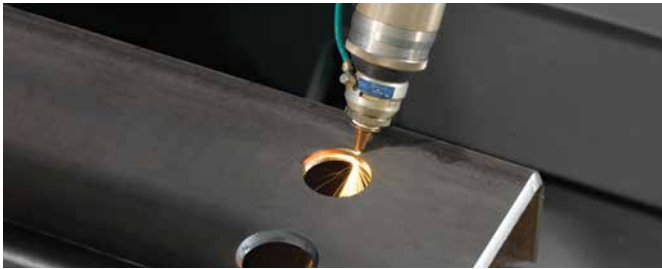
LT 14

Large sizes for large diameters

The loading system chains feed tubes and profiles continuously. An independent double chain configuration also allows separate loading during laser processing.

An operator station is positioned near the cutting enclosure for ease of supervision of the entire system.

The cutting process can be observed through large windows engineered to guarantee total process safety. A camera network is also available; the camera feed is shown directly on the operator interface.



Cutting head

The tilting cutting head can perform inclined cuts, weld preparations and chamfered holes without needing to move the tube, ensuring higher productivity and better cut quality.



LT 14

Ø max 355 mm

- processes tubes weighing up to 100 kg/m
- automatic handling system loads and unloads tubes up to 16000 mm in length
- fully automatic settings
- 3D cutting
- also processes open sections (angles, channels, columns, flats etc.) and special profiles

Parts are unloaded in a controlled manner without impact or any free-fall and the machine continues machining the next component during unloading operations.

Integrated probe advantages

An integrated inspection-probe on the cutting head measures and compensates for tube distortions to ensure cut features are positioned within the required tolerances.

FAST UNLOADER FOR SHORT PARTS

Parts less than 3200mm in length can be very quickly unloaded using the “short-parts” front conveyor.

LT 14

Performance and flexibility

Scrap evacuation

A steel belted scrap-conveyor automatically removes the scrap into a collection bin outside the system.

Tube support loading handlers

The tube loading arms double up as intermediate supports when the tube is placed in the cutting line minimising any distortion caused by the tube weight during its movements in the cutting cycle.



The opportunities of laser

THE ADVANTAGES OF LASER

- automatic handling
- manufacturing process simplification
- machining accuracy and part repeatability



Universal laser use

The laser is a universal tool and can machine the widest variety of sections, materials and thicknesses without the need to re-tool the machine.



3D cutting

In 3D cutting mode the machining of the chamfer for weld preparations can be completed.

Round tube Ø	min. 30 mm - max. 355 mm
Square tubes	min. 30x30 mm - max. 260x260 mm
Rectangular tube	min. 30x30 mm - max. 300x200 mm
Open profiles	min. sec. 80x80 mm - max. sec. 260x260 mm
Maximum cutting thickness	max 16 mm

The end cuts and cut features along the length of the tube are machined on a single machine, in a single cycle, with a single tool, eliminating the traditional multiple machine process and handling between them.

LT 24

The right solution for heavy fabrication

LT 24

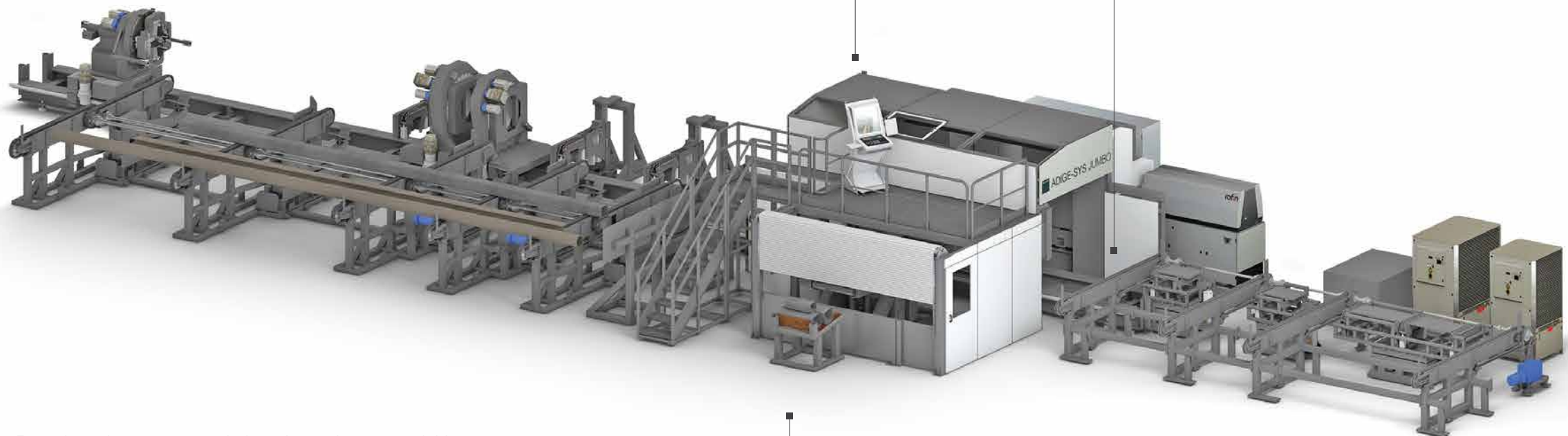
Ø max 610 mm

- processes tube weighing up to 300 kg/m
- automatic handling system loads and unloads tubes up to 18000 mm in length
- 3D cutting
- fully automatic settings
- also processes open sections(angles, channels, columns, flats etc.) and special profiles

The cross-loading chain system for the tube loader can be configured with single or double chains, the double chains allows a pause in the loading cycle to separate the stock lengths

The entire process - including the cutting area - can be fully observed and monitored from the operator station through large windows on the top of the machine

Finished parts from 3200 mm to 18000 mm long are unloaded onto motorised chains and can be taken off without interrupting the cutting process



Parts less than 3200 mm in length can be very quickly unloaded using the “short-parts” front conveyor



Unloading conveyor

The short-part unloading conveyor also tracks the vertical movement of the tube profile during the cutting operations for better support and prevents parts free-falling and causing damage.



Cutting head

The cutting head can process both ends of the tube and machine between the tube support spindles, allowing the whole tube length to be machined with minimum or no scrap.

Automation makes everything easier

SHORT PART UNLOADING

The short-part unloading conveyor also tracks the vertical movement of the tube profile during the cutting operations for better support and prevents parts free-falling and causing damage.



The advantages of part unloading beds

On the unloading side, the motorised supporting surfaces receive the finished parts and carefully place them on the take-off chains. The unloading surfaces follow and support the tube profile during rotation to limit deformations and support movements.

Handling of profiles to be manufactured

The possibility to machine all standard tubular sections and open profiles on the same machine set-up allows the user to switch rapidly from one job to the next.



The opportunities of laser



Minimal thermal alterations to the laser-machined surfaces because the laser transfers much less heat to the material than other technologies (plasma, oxygen cutting)

THE ADVANTAGES OF LASER

- parts and frames of any complexity
- preparation for welding
- small or large batches
- no special tools needed

Flat bar cutting

Laser cutting parts out of flat bar instead of flat sheet reduces cycle times, saves material, and eliminates the need to separate finished parts from the flat sheet.



Non-stop production

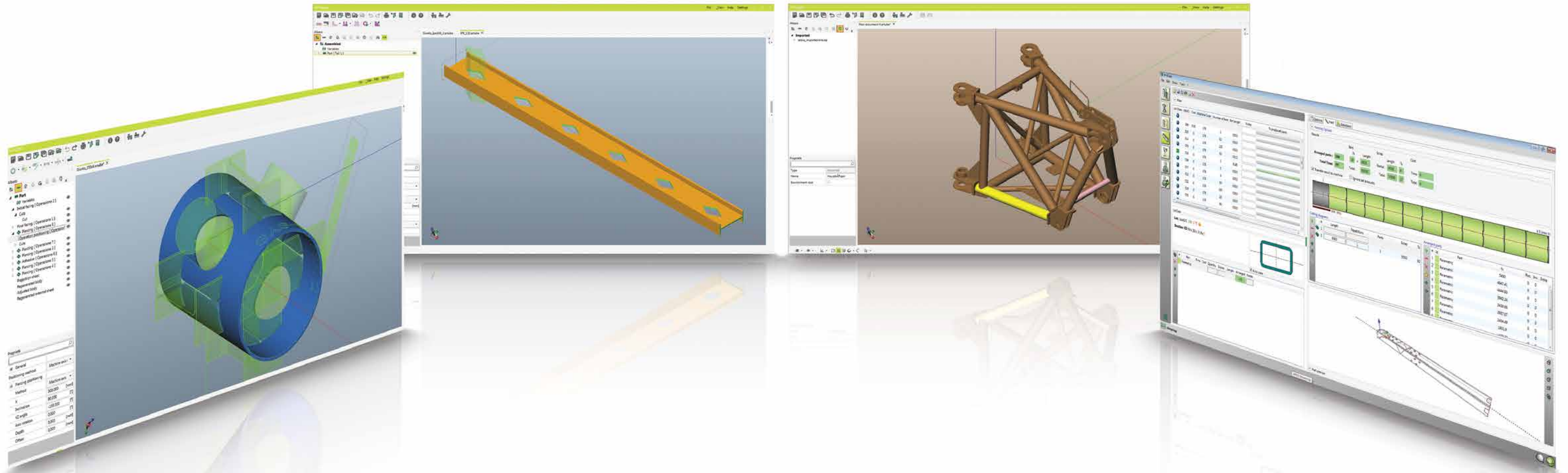
Unlike other technologies, the high degree of automation of the entire process and the absence of any tool wear allows a continuous and stable production with the minimum of supervision.



Round tube Ø	min. 80 mm - max. 610 mm
Square tubes	min. 80x80 mm - max. 450x450 mm
Rectangular tube	min. 80x120 mm - max. 500x300 mm
Open profiles	min. sec. 80x80 mm - max. sec. 500x300 mm
Maximum cutting thickness	max. 16 mm

SOFTWARE

Designing and manufacturing



Parts can be drawn or files imported directly from other CAD programs and are then automatically translated into the most efficient part programs.

Going from the idea to the part is quick and easy by using a fully three-dimensional, parametric system.

Standard sections, special sections and open profiles can be programmed in a simple, user-friendly manner.

Frames and complex structures can be created using one or more sections of any type at the same time.

Automatic jointing between tubes also of different

diameter, thickness and shape simplifies the assembly of frames and structures.

Effective compacting techniques - called nesting - can be pre-prepared off-line to minimise scrap.

Drawn parts may be viewed rapidly with all the required geometries before transferring the part program to the machine.

Product batches consisting of one or more parts, each with respective quantities, can be defined using the part program archive.



Service anytime, anywhere

When required, a two-way video connection can be established with the machine operator to simplify troubleshooting and to perfect machine performance and improve application solutions

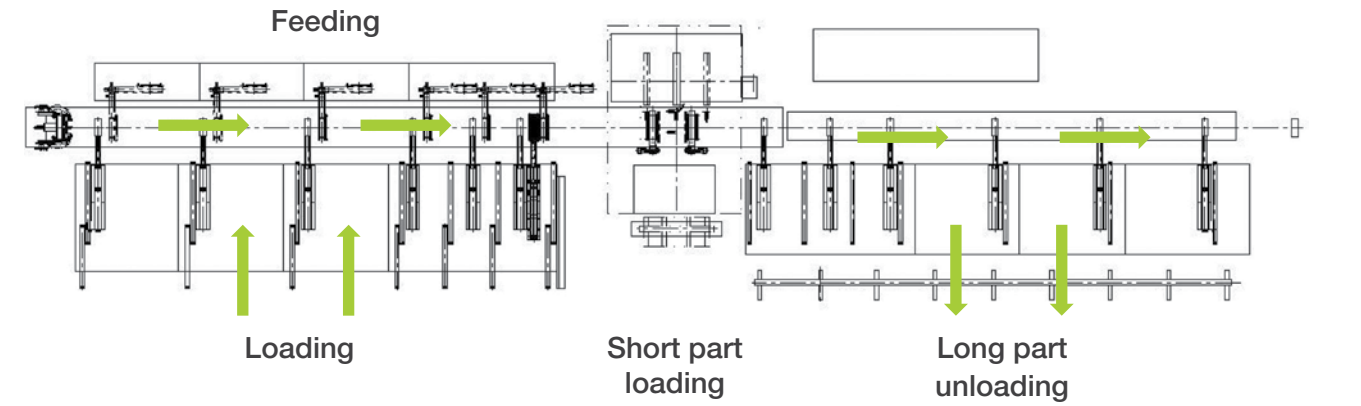
All BLM GROUP systems can be linked up to our service technicians' network for the certainty of immediate help and a rapid fault diagnosis and repair.

BLM GROUP is present worldwide with a local support and service network to ensure the very best performance and quality of all our installed systems.

THE ADVANTAGES OF LASER

A tube laser cutting system concentrates all the jobs in to one step which would otherwise be distributed on several traditional machines. Single set-up; no tool wear, unlike traditional plasma cutting and/or stock removal. Time saved as a result of process simplification (also in terms of design and programming) means significantly lower cost per part.

	24"	14"
Round tubes diameter	min. 80 mm - max. 610 mm	min. 30 mm - max. 355 mm
Square tubes	min. 80x80 mm - max. 450x450 mm	min. 30x30 mm - max. 260x260 mm
Rectangular tubes min	min. 80x120 mm - max. 500x300 mm	min. 30x30 mm-max. 300x200 mm
Open profiles	min. sec. 80x80 mm max. sec 500x300 mm	min. sec. 80x80 mm max. sec. 260x260 mm
Maximum cutting thickness	max 16 mm	
Standard materials	mild steel, stainless steel (other materials available on demand)	
Min. loadable bar length	min. 4000 mm - max. 18000 mm	
Min. long part unloading length	min. 3000 mm - max. 18000 mm	
Short part unloading length to	up to 3200 mm	
Laser source power	3500 W (higher on request)	
Settings	Fully automatic	



☞ Features, weights, measures, capacities and machine performance descriptions are not binding and may be changed without prior notice. The photographs are only examples.

LASERTUBE CUTTING SYSTEM

tube bending
endforming
sawing, deburring and washing
cutting & end machining
combined sheet and tube laser cutting
handling
3d measuring
manufacturing cell
non touch measuring systems
process control software



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